

REIMBURSABLE SPACE ACT AGREEMENT
BETWEEN
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LYNDON B. JOHNSON SPACE CENTER WHITE SANDS TEST FACILITY
AND AEROJET ROCKETDYNE, INC
FOR POST BOOST PROPULSION SYSTEM (PBPS) STATIC HOT-FIRE TESTING.

ARTICLE 1. AUTHORITY AND PARTIES

In accordance with the National Aeronautics and Space Act (51 U.S.C. § 20113(e)), this Agreement is entered into by the National Aeronautics and Space Administration NASA Lyndon B. Johnson Space Center White Sands Test Facility, located at 12600 NASA Road, Las Cruces, NM 88012 (hereinafter referred to as "NASA JSC," "JSC," "NASA WSTF," "WSTF," or "NASA") and AEROJET ROCKETDYNE, INC located at 8900 De Soto Ave., Canoga Park, CA 91304-1967 (hereinafter referred to as "Partner" or "AEROJET ROCKETDYNE OF DE, INC"). NASA and Partner may be individually referred to as a "Party" and collectively referred to as the "Parties."

ARTICLE 2. PURPOSE

The purpose of this agreement is to allow NASA White Sands Test Facility (WSTF) and Aerojet Rocketdyne of DE, Inc. (hereinafter "AR" or "Partner") to conduct static hot-fire testing of the Post Boost Propulsion System (PBPS). Testing will involve the use of an altitude simulation propulsion test chamber at WSTF.

ARTICLE 3. RESPONSIBILITIES

NASA will use reasonable efforts to:

- Participate in a technical interchange/kick off meeting.
2. Develop a WSTF test directive to direct this test series.
3. Procure necessary quantities of propellants (Monomethylhydrazine (MMH) and Mixed Oxides of Nitrogen (MON-3)), pressurants (gaseous nitrogen (GN2) and/or gaseous helium (GHe)), and ordnance initiator per AR provided specification.
4. Provide propellant storage tanks, and feed systems capable of supplying MON-3, MMH, and pressurant to the test article.
5. Perform installation and removal of pyro valve ordnance.
6. Provide unclassified facility instrumentation and data acquisition for all feed system and propellant handling systems.
7. Provide remotely operated high speed still photography, high speed video (400 frames per second minimum), high definition video, and infra-red video.
8. Provide high and low frequency data acquisition system for facility instrumentation.
9. Provide security infrastructure and protocol necessary to meet the security classification requirement of the program.

10. Provide fabrication/modification of facility-to-PBPS interface test fixtures, structure, bracketry for handling, loading and hot-fire configuration.
11. Provide fabrication/modification of propellant and pressurant supply and detanking systems, and test stand post-test decontamination systems, per test requirements.
12. Conduct Design and System Safety Reviews with support from AR in accordance with WSTF Policy.
13. Generate Procedures for hazardous operations (i.e. propellant handling, ordnance installation/removal, hot-fire testing, pre & post-test test article (TA) servicing, and TA decontamination).
14. Prepare and conduct a Test Readiness Review (TRR) with support from AR.
15. Perform hot fire tests.
16. Perform decontamination of facility and test hardware.
17. Provide a final report documenting the results of all test operations.
18. Provide cost/milestone reporting through project life cycle.

AEROJET ROCKETDYNE OF DE, INC will use reasonable efforts to:

1. Participate in Technical interchange/kickoff meeting.
2. Provide a test plan for PBPS testing.
3. Provide approval to corresponding WSTF generated test directive.
4. Provide to WSTF hardware drawings, interface control drawings, instrumentation lists, and supporting documentation.
5. Provide secure Special Test Equipment (STE) which includes valve drivers for test article valve actuation, ordnance voltage and simulator Units, pyro valve primer chamber assembly, and STE handling fixtures and shipping equipment. Engineers and operators will also be provided for installation and operation of these systems
6. Provide secure Digital Data Acquisition System (DDAS) and Ground Test Instrumentation (GTI) specific to characterizing the test articles performance, with associated system engineers/operators for installation and operation of these systems.
7. Provide transportation of the test article and ground support equipment (GSE) to and from WSTF.
8. Review and provide approval on all test configurations and test procedures.
9. Support design and system safety review process per WSTF policy.
10. Participate in the WSTF TRR.
11. Participate in operation of AR provided systems during hot-fire testing.
12. Contribute to development of final test reports and data packages.

ARTICLE 4. SCHEDULE AND MILESTONES

The planned major milestones for the activities defined in the "Responsibilities" Article are as follows:

Start of Project

Authority to Proceed

AR and WSTF participate in a Technical interchange/kickoff meeting	+2 weeks
AR provides WSTF finalized Facility Requirements Document (FRD).	+1 month
AR provides WSTF with PBPS hardware drawings, interface control documents, instrumentation lists and supporting documents.	+2 months
WSTF provides initial test directive covering FRD scope to AR for approval.	+2 months
WSTF and AR prepare and conduct a Preliminary Design Review (PDR)	+3 months
WSTF and AR prepare and conduct a Critical Design Review (CDR)	+5 months
WSTF security infrastructure and protocol ready for installation of AR secure STE, DDAS and GTI systems	+5 months
AR provides WSTF finalized test plan	+6 months
WSTF completes fabrication/modification of facility-to-PBPS interface test fixtures, structure, bracketry for handling, loading and hotfire configuration.	+7 months
WSTF provides finalized test directive covering test plan scope to AR for approval.	+7 months
AR provides WSTF STE, DDAS, and test article specific GTI	+8 months
AR delivers to WSTF the PBPS-1.	+8 months
WSTF completes fabrication/modification of propellant and pressurant supply and detanking systems, and test stand post-test decontamination systems, per test requirements.	+8 months
WSTF provides still photography, high speed, high definition, infrared video, high and low speed data acquisition system, and facility system controls)	+8 months
AR reviews and provides approval on all test configurations and test procedures.	+9 months
WSTF performs and AR participates in PBPS Test Readiness Review.	+10 months
AR and WSTF perform hot-fire testing of the PBPS-1.	+11 months
AR delivers to WSTF the PBPS-2.	+12 months

AR and WSTF perform hot-fire testing of the PBPS-2.	+14 months
AR delivers to WSTF the PBPS-3 (Qual-1).	+15 months
AR and WSTF perform hot-fire testing of the PBPS-3 (Qual-1).	+17 months
AR delivers to WSTF the PBPS-4 (Qual-2).	+18 months
AR and WSTF perform hot-fire testing of the PBPS-4 (Qual-2).	+20 months
AR delivers to WSTF the PBPS-5 (Qual-3).	+21 months
AR and WSTF perform hot-fire testing of the PBPS-5 (Qual-3).	+23 months
WSTF performs decontamination of the facility and PBPS Test Hardware.	No later than 14 calendar days from hot fire completion date
WSTF provides AR final data report documenting the results of all test operations.	No later than 10 calendar days from hot fire completion date

ARTICLE 5. FINANCIAL OBLIGATIONS

A. Partner agrees to reimburse NASA an estimated cost of \$4,744,231.08 for NASA to carry out its responsibilities under this Annex. The Partner agrees to reimburse NASA an initial payment of \$1,500,000 prior to the initiation of work under this Annex. Subsequent advance payments will be scheduled to ensure that funds are resident with NASA before Federal Obligations are incurred in support of this Annex.

B. Payment shall be payable to the National Aeronautics and Space Administration through the NASA Shared Services Center (NSSC) (choose one form of payment):

(1) U.S. Treasury FEDWIRE Deposit System, Federal Reserve Wire Network Deposit System;

(2) pay.gov at www.nssc.nasa.gov/customerservice (select "Pay NASA" from the Quick Links to right) of the page) or <https://paygov.nssc.nasa.gov/> and select the appropriate NASA Center for the agreement from the drop down; or

(3) check. A check should be payable to NASA and sent to:

NASA Shared Services Center
FMD – Accounts Receivable For the Accounts of:
JSC, White Sands Test Facility
Building 1111,

Jerry Hlass Rd.,
Stennis Space Center, MS 39529

Payment by electronic transfer (#1 or #2, above), is strongly encouraged, and payment by check is to be used only if circumstances preclude the use of electronic transfer. All payments and other communications regarding this Agreement shall reference the Center name, title, date, and number of this Agreement.

C. NASA will not provide services or incur costs beyond the existing payment. Although NASA has made a good faith effort to accurately estimate its costs, it is understood that NASA provides no assurance that the proposed effort under this Agreement will be accomplished for the above estimated amount. Should the effort cost more than the estimate, Partner will be advised by NASA as soon as possible. Partner shall pay all costs incurred and has the option of canceling the remaining effort, or providing additional funding in order to continue the proposed effort under the revised estimate. Should this Agreement be terminated, or the effort completed at a cost less than the agreed-to estimated cost, NASA shall account for any unspent funds within one (1) year after completion of all effort under this Agreement, and promptly thereafter return any unspent funds to Partner. Return of unspent funds will be processed via Electronic Funds Transfer (EFT) in accordance with 31 C.F.R. Part 208 and, upon request by NASA, Partner agrees to complete the Automated Clearing House (ACH) Vendor/Miscellaneous Payment Enrollment Form (SF 3881).

D. Notwithstanding any other provision of this Agreement, all activities under or pursuant to this Agreement are subject to the availability of funds, and no provision of this Agreement shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, (31 U.S.C. § 1341).

ARTICLE 6. PRIORITY OF USE

Any schedule or milestone in this Agreement is estimated based upon the Parties' current understanding of the projected availability of NASA goods, services, facilities, or equipment. In the event that NASA's projected availability changes, Partner shall be given reasonable notice of that change, so that the schedule and milestones may be adjusted accordingly. The Parties agree that NASA's use of the goods, services, facilities, or equipment shall have priority over the use planned in this Agreement. Should a conflict arise, NASA in its sole discretion shall determine whether to exercise that priority. Likewise, should a conflict arise as between two or more non-NASA Partners, NASA, in its sole discretion, shall determine the priority as between those Partners. This Agreement does not obligate NASA to seek alternative government property or services under the jurisdiction of NASA at other locations.

ARTICLE 7. NONEXCLUSIVITY

This Agreement is not exclusive; accordingly, NASA may enter into similar agreements for the same or similar purpose with other private or public entities.

ARTICLE 8. LIABILITY AND RISK OF LOSS

A. Partner hereby waives any claims against NASA, its employees, its related entities, (including, but not limited to, contractors and subcontractors at any tier, grantees, investigators, customers, users, and their contractors and subcontractors, at any tier) and employees of NASA's related entities for any injury to, or death of, Partner employees or the employees of Partner's related entities, or for damage to, or loss of, Partner's property or the property of its related entities arising from or related to activities conducted under this Agreement, whether such injury, death, damage, or loss arises through negligence or otherwise, except in the case of willful misconduct.

B. Partner further agrees to extend this unilateral waiver to its related entities by requiring them, by contract or otherwise, to waive all claims against NASA, its related entities, and employees of NASA and employees of NASA's related entities for injury, death, damage, or loss arising from or related to activities conducted under this Agreement.

ARTICLE 9. LIABILITY AND RISK OF LOSS - INSURANCE FOR DAMAGE TO NASA PROPERTY

A. Partner shall, at no cost to NASA, maintain throughout the term of the Agreement, insurance to cover the loss of or Damage to U.S. Government property as a result of any activities conducted under this Agreement. The policy must cover the cost of replacing (at fair market value, as reasonably determined by NASA) or repairing any U.S. Government property (real or personal) Damaged as a result of any performance of this Agreement, including performance by the U.S. Government or its contractors or subcontractors, at any tier. "Damage" shall mean damage to, loss of, or loss of use of any property; soil, sediment, surface water, ground water, or other environmental contamination or damage; loss of revenue or profits; other direct damages; or any indirect, or consequential damage arising therefrom.

B. The insurance required under this subparagraph shall provide coverage in an amount acceptable to NASA. All terms and conditions in the policy shall be acceptable to NASA, and shall require thirty (30) days notice to NASA of any cancellation or change affecting coverage. The policy shall cover all risks of loss except that it may exclude Damage caused by the U.S. Government's willful misconduct. The insurance policy shall provide that the insurer waives its right as a subrogee against U.S. Government contractors, subcontractors, or related entities for damage.

C. Upon obtaining the insurance required under this paragraph, or upon obtaining any modification or amendment thereof, Partner shall personally deliver, or send by registered or certified mail, postage prepaid, two copies of such insurance policy, or such modification or amendment, to NASA at the following address, or at such address as NASA may, from time to time, designate in writing:

National Aeronautics and Space Administration
Attn: Associate General Counsel (Commercial and Intellectual Property Law)
Washington, DC 20546
Or, [Chief Counsel's Office, where appropriate]

D. An insurance policy whose terms and conditions are reviewed and approved by NASA, or an agreement on an alternative method of protection, is a condition precedent to Partner's access to or use of U.S. Government property or U.S. Government services under this Agreement.

E. In the event Partner is unable to obtain insurance coverage required by subparagraph A. above, the Parties agree to consider, subject to review, approval and agreement by NASA, alternative methods of protecting U.S. Government property (e.g., by acceptable self-insurance or purchase of an appropriate bond).

F. In the event U.S. Government property is Damaged as a result of activities conducted under this agreement, Partner (whether as an insured loss payee or under an alternate protection method) shall be solely responsible for the repair and restoration of such property subject to NASA direction. Partner's liability for such repair and restoration shall not exceed the agreed insurance policy or other protection method limits.

ARTICLE 10. INTELLECTUAL PROPERTY RIGHTS - DATA RIGHTS

A. General

1. "Related Entity" as used in this Data Rights Article means a contractor, subcontractor, grantee, or other entity having a legal relationship with NASA or Partner that is assigned, tasked, or contracted to perform activities under this Agreement.
2. "Data" means recorded information, regardless of form, the media on which it is recorded, or the method of recording.
3. "Proprietary Data" means Data embodying trade secrets developed at private expense or commercial or financial information that is privileged or confidential, and that includes a restrictive notice, unless the Data is:
 - a. known or available from other sources without restriction;
 - b. known, possessed, or developed independently, and without reference to the Proprietary Data;
 - c. made available by the owners to others without restriction; or
 - d. required by law or court order to be disclosed.
4. Data exchanged under this Agreement is exchanged without restriction except as otherwise provided herein.
5. Notwithstanding any restrictions provided in this Article, the Parties are not restricted in the use, disclosure, or reproduction of Data provided under this Agreement that meets one of the exceptions in 3., above. If a Party believes that any exceptions apply, it shall notify the other Party before any unrestricted use, disclosure, or reproduction of the Data.
6. The Parties will not exchange preexisting Proprietary Data under this Agreement unless authorized herein or in writing by the owner.

7. If the Parties exchange Data having a notice that the Receiving Party deems is ambiguous or unauthorized, the Receiving Party shall tell the Providing Party. If the notice indicates a restriction, the Receiving Party shall protect the Data under this Article unless otherwise directed in writing by the Providing Party.
8. The Data rights herein apply to the employees and Related Entities of Partner. Partner shall ensure that its employees and Related Entity employees know about and are bound by the obligations under this Article.
9. Disclaimer of Liability: NASA is not restricted in, or liable for, the use, disclosure, or reproduction of Data without a restrictive notice or for Data Partner gives, or is required to give, the U.S. Government without restriction.
10. Partner may use the following or a similar restrictive notice :.

Proprietary Data Notice

The data herein include Proprietary Data and are restricted under the Data Rights provisions of Space Act Agreement [provide applicable identifying information].

Partner should also mark each page containing Proprietary Data with the following or a similar legend: "Proprietary Data – Use And Disclose Only Under the Notice on the Title or Cover Page."

B. Data First Produced by Partner Under this Agreement

If Data first produced by Partner or its Related Entities under this Agreement is given to NASA, and the Data is Proprietary Data, and it includes a restrictive notice, NASA will use reasonable efforts to protect it. The Data will be disclosed and used (under suitable protective conditions) only for U.S. Government purposes.

C. Data First Produced by NASA Under this Agreement

If Partner requests that Data first produced by NASA under this Agreement be protected, and NASA determines it would be Proprietary Data if obtained from Partner, NASA will mark it with a restrictive notice and use reasonable efforts to protect it for five years after its development. During the restricted period, unless greater rights are otherwise permitted in writing by Partner, the Data may be disclosed and used by NASA and any Related Entity of NASA (under suitable protective conditions) only for carrying out NASA responsibilities under this Agreement, and thereafter for any purpose (should NASA still have possession of the Data). At Partner's written request, when no longer needed by NASA for the purpose of carrying out NASA responsibilities under this Agreement, such marked Data (or any portion thereof) will be destroyed or otherwise disposed of at any time before expiration of the restricted period as directed by Partner.

D. Publication of Results

The National Aeronautics and Space Act (51 U.S.C. § 20112) requires NASA to provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof. As such, NASA may publish unclassified and non-

Proprietary Data resulting from work performed under this Agreement. The Parties will coordinate publication of results allowing a reasonable time to review and comment.

E. Data Disclosing an Invention

If the Parties exchange Data disclosing an invention for which patent protection is being considered, and the furnishing Party identifies the Data as such when providing it to the Receiving Party, the Receiving Party shall withhold it from public disclosure for a reasonable time (one (1) year unless otherwise agreed or the Data is restricted for a longer period herein).

F. Copyright

Data exchanged with a copyright notice and with no restrictive notice is presumed to be published. The following royalty-free licenses apply:

1. If indicated on the Data that it was produced outside of this Agreement, it may be reproduced, distributed, and used to prepare derivative works only for carrying out the Receiving Party's responsibilities under this Agreement.
2. Data without the indication of F.1. is presumed to be first produced under this Agreement. Except as otherwise provided in paragraph E. of this Article, and in the Invention and Patent Rights Article of this Agreement for protection of reported inventions, the Data may be reproduced, distributed, and used to prepare derivative works for any purpose.

G. Data Subject to Export Control

Whether or not marked, technical data subject to the export laws and regulations of the United States provided to Partner under this Agreement must not be given to foreign persons or transmitted outside the United States without proper U.S. Government authorization.

H. Handling of Background, Third Party Proprietary, and Controlled Government Data

1. NASA or Partner (as Disclosing Party) may provide the other Party or its Related Entities (as Receiving Party):
 - a. Proprietary Data developed at Disclosing Party's expense outside of this Agreement (referred to as Background Data);
 - b. Proprietary Data of third parties that Disclosing Party has agreed to protect or is required to protect under the Trade Secrets Act (18 U.S.C. § 1905) (referred to as Third Party Proprietary Data); and
 - c. U.S. Government Data, including software and related Data, Disclosing Party intends to control (referred to as Controlled Government Data).
2. All Background, Third Party Proprietary and Controlled Government Data provided by Disclosing Party to Receiving Party shall be marked by Disclosing Party with a restrictive notice and protected by Receiving Party in accordance with this Article.

3. Disclosing Party provides the following Data to Receiving Party. The lists below may not be comprehensive, are subject to change, and do not supersede any restrictive notice on the Data.

a. Background Data:

The Disclosing Party's Background Data, if any, will be identified in a separate technical document.

b. Third Party Proprietary Data:

The Disclosing Party's Third Party Proprietary Data, if any, will be identified in a separate technical document.

c. Controlled Government Data:

The Disclosing Party's Controlled Government Data, if any, will be identified in a separate technical document.

d. Notwithstanding H.4., NASA software and related Data will be provided to Partner under a separate Software Usage Agreement (SUA). Partner shall use and protect the related Data in accordance with this Article. Unless the SUA authorizes retention, or Partner enters into a license under 37 C.F.R. Part 404, the related Data shall be disposed of as NASA directs:

None

4. For such Data identified with a restrictive notice pursuant to H.2. including such Data identified pursuant to this Article, Receiving Party shall:

- a. Use, disclose, or reproduce such Data only as necessary under this Agreement;
- b. Safeguard such Data from unauthorized use and disclosure;
- c. Allow access to such Data only to its employees and any Related Entity requiring access under this Agreement;
- d. Except as otherwise indicated in 4.c., preclude disclosure outside Receiving Party's organization;
- e. Notify its employees with access about their obligations under this Article and ensure their compliance, and notify any Related Entity with access about their obligations under this Article; and
- f. Dispose of such Data as Disclosing Party directs.

I. Oral and visual information

If Partner discloses Proprietary Data orally or visually, NASA will have no duty to restrict, or liability for disclosure or use, unless Partner:

1. Orally informs NASA before initial disclosure that the Data is Proprietary Data, and
2. Reduces the Data to tangible form with a restrictive notice and gives it to NASA within ten (10) calendar days after disclosure.

J. Classified Material

If classified material is used under this Agreement, Partner must provide a completed Contract Security Classification Specification (DD Form 254 or equivalent) to the NASA Point of Contact. Handling of classified material must be consistent with NASA and U.S Federal Government statutes, regulations, and policies.

J. Classified Material

If classified material is used under this Agreement, Partner must provide a completed Contract Security Classification Specification (DD Form 254 or equivalent) to the NASA Point of Contact. Handling of classified material must be consistent with NASA and U.S. Federal Government statutes, regulations, and policies.

ARTICLE 11. INTELLECTUAL PROPERTY RIGHTS - INVENTION AND PATENT RIGHTS

A. "Related Entity" as used in this Invention and Patent Rights Article means a contractor, subcontractor, grantee, or other entity having a legal relationship with NASA or Partner assigned, tasked, or contracted with to perform activities under this Agreement.

B. The invention and patent rights herein apply to employees and Related Entities of Partner. Partner shall ensure that its employees and Related Entity employees know about and are bound by the obligations under this Article.

C. NASA has determined that 51 U.S.C. § 20135(b) does not apply to this Agreement. Therefore, title to inventions made (conceived or first actually reduced to practice) under this Agreement remain with the respective inventing party(ies). No invention or patent rights are exchanged or granted under this Agreement. NASA and Partner will use reasonable efforts to report inventions made jointly by their employees (including employees of their Related Entities). The Parties will consult and agree on the responsibilities and actions to establish and maintain patent protection for joint invention, and on the terms and conditions of any license or other rights exchanged or granted between them.

ARTICLE 12. USE OF NASA NAME AND NASA EMBLEMS

A. NASA Name and Initials

Partner shall not use "National Aeronautics and Space Administration" or "NASA" in a way that creates the impression that a product or service has the authorization, support, sponsorship, or endorsement of NASA, which does not, in fact, exist. Except for releases under the "Release of General Information to the Public and Media" Article, Partner must submit any proposed public use of the NASA name or initials (including press releases and all promotional and advertising use) to the NASA Associate Administrator for the Office of Communications or designee ("NASA Communications") for review and approval. Approval by NASA Office of Communications shall be based on applicable law and policy governing the use of the NASA name and initials.

B. NASA Emblems

Use of NASA emblems (i.e., NASA Seal, NASA Insignia, NASA logotype, NASA Program Identifiers, and the NASA Flag) is governed by 14 C.F.R. Part 1221. Partner must submit any proposed use of the emblems to NASA Communications for review and approval.

ARTICLE 13. RELEASE OF GENERAL INFORMATION TO THE PUBLIC AND MEDIA

NASA or Partner may, consistent with Federal law and this Agreement, release general information regarding its own participation in this Agreement as desired.

Pursuant to Section 841(d) of the NASA Transition Authorization Act of 2017, Public Law 115-10 (the "NTAA"), NASA is obligated to publicly disclose copies of all agreements conducted pursuant to NASA's 51 U.S.C. §20113(e) authority in a searchable format on the NASA website within 60 days after the agreement is signed by the Parties. The Parties acknowledge that a copy of this Agreement will be disclosed, without redactions, in accordance with the NTAA.

ARTICLE 14. DISCLAIMER OF WARRANTY

Goods, services, facilities, or equipment provided by NASA under this Agreement are provided "as is." NASA makes no express or implied warranty as to the condition of any such goods, services, facilities, or equipment, or as to the condition of any research or information generated under this Agreement, or as to any products made or developed under or as a result of this Agreement including as a result of the use of information generated hereunder, or as to the merchantability or fitness for a particular purpose of such research, information, or resulting product, or that the goods, services, facilities or equipment provided will accomplish the intended results or are safe for any purpose including the intended purpose, or that any of the above will not interfere with privately-owned rights of others. Neither the government nor its contractors shall be liable for special, consequential or incidental damages attributed to such equipment, facilities, technical information, or services provided under this Agreement or such research, information, or resulting products made or developed under or as a result of this Agreement.

ARTICLE 15. DISCLAIMER OF ENDORSEMENT

NASA does not endorse or sponsor any commercial product, service, or activity. NASA's participation in this Agreement or provision of goods, services, facilities or equipment under this Agreement does not constitute endorsement by NASA. Partner agrees that nothing in this Agreement will be construed to imply that NASA authorizes, supports, endorses, or sponsors any product or service of Partner resulting from activities conducted under this Agreement, regardless of the fact that such product or service may employ NASA-developed technology.

ARTICLE 16. COMPLIANCE WITH LAWS AND REGULATIONS

A. The Parties shall comply with all applicable laws and regulations including, but not limited to, safety; security; export control; environmental; and suspension and debarment laws and regulations. Access by a Partner to NASA facilities or property, or to a NASA Information Technology (IT) system or application, is contingent upon compliance with NASA security and safety policies and guidelines including, but not limited to, standards on badging, credentials, and facility and IT system/application access.

B. With respect to any export control requirements:

1. The Parties will comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 C.F.R. Parts 120 through 130, and the Export Administration Regulations (EAR), 15 C.F.R. Parts 730 through 799, in performing work under this Agreement or any Annex to this Agreement. In the absence of available license exemptions or exceptions, the Partner shall be responsible for obtaining the appropriate licenses or other approvals, if required, for exports of hardware, technical data and software, or for the provision of technical assistance.

2. The Partner shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of work under this Agreement or any Annex under this Agreement, including instances where the work is to be performed on-site at NASA and where the foreign person will have access to export-controlled technical data or software.

3. The Partner will be responsible for all regulatory record-keeping requirements associated with the use of licenses and license exemptions or exceptions.

4. The Partner will be responsible for ensuring that the provisions of this Article apply to its Related Entities.

C. With respect to suspension and debarment requirements:

1. The Partner hereby certifies, to the best of its knowledge and belief, that it has complied, and shall comply, with 2 C.F.R. Part 180, Subpart C, as supplemented by 2 C.F.R. Part 1880, Subpart C.

2. The Partner shall include language and requirements equivalent to those set forth in subparagraph C.1., above, in any lower-tier covered transaction entered into under this Agreement.

ARTICLE 17. TERM OF AGREEMENT

This Agreement becomes effective upon the date of the last signature below ("Effective Date") and shall remain in effect until the completion of all obligations of both Parties hereto, or four years from the Effective Date, whichever comes first.

ARTICLE 18. RIGHT TO TERMINATE

Either Party may unilaterally terminate this Agreement by providing thirty (30) calendar days written notice to the other Party. In the event of such termination, Partner will be obligated to reimburse NASA for all costs for which the Partner was responsible and that have been incurred in support of this Agreement up to the date the termination notice is received by NASA. Where Partner terminates this Agreement, Partner will also be responsible for termination costs.

ARTICLE 19. CONTINUING OBLIGATIONS

The rights and obligations of the Parties that, by their nature, would continue beyond the expiration or termination of this Agreement, e.g., "Liability and Risk of Loss", "Intellectual Property Rights"-related clauses, and "Financial Obligations" shall survive such expiration or termination of this Agreement.

ARTICLE 20. POINTS OF CONTACT

The following personnel are designated as the Points of Contact between the Parties in the performance of this Agreement.

Management Points of Contact

NASA White Sands Test Facility
Jeremy Bruggemann
Aerospace Engineer/Project Manager
Mail Stop: RD
12600 NASA Road
Las Cruces, NM 88012
Phone: 575-525-7659
jeremy.bruggemann@nasa.gov

AEROJET ROCKETDYNE, INC
Bob Josker
X-PB Program Manager
Mail Suite: Mail Suite: RFB-77
8900 De Soto Ave.
Canoga Park, CA 91304-1967
Phone: 818-586-3498
robert.josker@rocket.com

ARTICLE 21. DISPUTE RESOLUTION

Except as otherwise provided in the Article entitled "Priority of Use," the Article entitled "Intellectual Property Rights – Invention and Patent Rights" (for those activities governed by 37 C.F.R. Part 404), and those situations where a pre-existing statutory or regulatory system exists (e.g., under the Freedom of Information Act, 5 U.S.C. § 552), all disputes concerning questions of fact or law arising under this Agreement shall be referred by the claimant in writing to the appropriate person identified in this Agreement as the "Points of Contact." The persons identified as the "Points of Contact" for NASA and the Partner will consult and attempt to resolve all issues arising from the implementation of this Agreement. If they are unable to come to agreement on any issue, the dispute will be referred to the signatories to this Agreement, or their designees, for joint resolution. If the Parties remain unable to resolve the dispute, then the NASA signatory or that person's

designee, as applicable, will issue a written decision that will be the final agency decision for the purpose of judicial review. Nothing in this Article limits or prevents either Party from pursuing any other right or remedy available by law upon the issuance of the final agency decision.

ARTICLE 22. INVESTIGATIONS OF MISHAPS AND CLOSE CALLS

In the case of a close call, mishap or mission failure, the Parties agree to provide assistance to each other in the conduct of any investigation. For all NASA mishaps or close calls, Partner agrees to comply with NPR 8621.1, "NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping" and Johnson Space Center, White Sands Test Facility.

ARTICLE 23. MODIFICATIONS

Any modification to this Agreement shall be executed, in writing, and signed by an authorized representative of NASA and the Partner.

ARTICLE 24. ASSIGNMENT

Neither this Agreement nor any interest arising under it will be assigned by the Partner or NASA without the express written consent of the officials executing, or successors, or higher-level officials possessing original or delegated authority to execute this Agreement.

ARTICLE 25. APPLICABLE LAW

U.S. Federal law governs this Agreement for all purposes, including, but not limited to, determining the validity of the Agreement, the meaning of its provisions, and the rights, obligations and remedies of the Parties.

ARTICLE 26. INDEPENDENT RELATIONSHIP

This Agreement is not intended to constitute, create, give effect to or otherwise recognize a joint venture, partnership, or formal business organization, or agency agreement of any kind, and the rights and obligations of the Parties shall be only those expressly set forth herein.

ARTICLE 27. LOAN OF GOVERNMENT PROPERTY

The parties shall enter into a NASA Form 893, Loan of NASA Equipment, for NASA equipment loaned to Partner.

ARTICLE 28. SIGNATORY AUTHORITY

The signatories to this Agreement covenant and warrant that they have authority to execute this Agreement. By signing below, the undersigned agrees to the above terms and conditions.

NATIONAL AERONAUTICS AND
SPACE ADMINISTRATION
WHITE SANDS TEST FACILITY

AEROJET ROCKETDYNE, INC

BY: _____
Robert Cort
Manager, White Sands Test Facility

BY: _____
Tracy Michael
Sr. Manager, Contract Administration

DATE: _____

DATE: July 19, 2021